CLAIMS:

1. A wire-bonding apparatus for forming electrical connections between a semiconductor chip and a leadframe, comprising a plurality of bond-heads associated with a plurality of work holders on said wire bonding apparatus for holding a plurality of leadframes, wherein each bond-head of the apparatus is capable of independent bonding operation simultaneously with the other bond-heads without synchronization of movement with the other bond-heads.

2. A wire-bonding apparatus according to claim 1, which includes a gap between the work holders on the apparatus to isolate each work holder from the vibration of another work holder.

3 A wire-bonding apparatus according to claim 2, wherein each work holder rests on a base separated from other bases by a gap and each separate base rests on a common lower chassis, the each separate base being separated from the common lower chassis by a vibration-insulating material.

4. A wire-bonding apparatus according to claim 1, wherein each work holder includes a track on which a leadframe is slideable, and an indexer adjacent the track to grip and position the leadframe relative to each associated bond-head and to slide the leadframe across each work holder.

5. A wire-bonding apparatus according to claim 1, including storage means in which leadframes are storable and which are operatively connected with the apparatus to automatically provide leadframes to the work holder and/or to automatically receive leadframes that have been processed.

6. A wire-bonding apparatus according to claim 1, including a transportation system comprising a line transporter having rollers that move the leadframes along their designated direction of travel.

7. A wire-bonding apparatus according to claim 6, which includes a transport arm for lifting a leadframe away from the line transporter to a designated location such that the leadframe is substantially adjacent the work holder, for transfer to the work holder

8. A wire-bonding apparatus according to claim 6, wherein the transportation system is capable of transporting a leadframe to each work holder for processing and of transporting each processed leadframe away from a work holder without passing through another work holder.

9. A wire-bonding apparatus according to claim 7, wherein each transport arm allows bi-directional movement of leadframes away from and/or towards the line transporter.

10 A wire-bonding apparatus according to claim 1, which includes a cardcage for storing electrical and/or electronic components for the functioning of the apparatus, wherein drivers to drive mechanical components of the apparatus are houseable within the cardcage.

11. A wire-bonding apparatus according to claim 10, wherein each bond-head is controlled by a separate controller board housed in the cardcage.

12. A wire-bonding apparatus according to claim 11, wherein each controller board includes a heat-sink.

13. A wire-bonding apparatus according to claim 10, wherein the cardcage includes cooler fans to lower the temperature inside the cardcage

14. A wire-bonding apparatus according to claim 1, wherein the plurality of bond-heads are capable of simultaneously conducting bonding of wires of different types.

15. A wire-bonding apparatus according to claim 14, wherein different bond-heads are capable of conducting bonding with gold wires and copper wires simultaneously.

16. A wire-bonding apparatus according to claim 14, wherein different bond-heads are capable of conducting bonding with wires of different diameters simultaneously.

17. A wire-bonding apparatus according to claim 1, wherein different bond-heads are capable of conducting bonding using different patterns simultaneously